Data Sheet

We make sure

FUJITSU COMPUTERS SIEMENS

ESPRIMO™ E Series Economy in Small Form Factor

Issue June 2006

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Economy

Sophisticated technologies for best in class economy.

Reduce cost of your professional PC by lowest energy consumption! The switched monitor outlet powers the display through the system. Switching off the systems means disconnecting the display, this saves up to ~ 20 % of the display power consumption annually. Additionally, software and BIOS power management solutions reduce the overall average power consumption.

Further Total Cost of Ownership reductions are achieved through a comprehensive set of manageability features, sophisticated security solutions and a service friendly cabinet design.

For highest economy, ESPRIMO professional PCs are designed to increase your productivity and to decrease your cost.

Reliability

- Complete system development and manufacturing by Fujitsu Siemens Computers guarantees highest quality
- Platform stability and product continuity with managed lifecycle up to 18 month and chipset diversity

Environment

- Build with specially selected materials, the ESPRIMO Green PC brings economy and ecology in harmony
- From development to production, from transport to recycling –minimize the impact on the environment and limit the use of unrecoverable resources.

Ergonomics

- Sophisticated hardware design with optimized fans and air flow provides most silent system for an efficient working environment
- Best usability and complete quality – service friendly cabinet and easy access to all components

Customizing

- Tailor-made products to meet customer individual requirements
- Freedom of choice with systems which perfectly fit to specific customer

Manageability

- Reduce Total Cost of Ownership with a comprehensive set of system management features
- Easy and remote administration with DeskView client management

Security

- Access and data protection with sophisticated hardware and software components for secure systems
- Protect property – secure hardware and data and limit access with SmartCard Reader

	E5905	E5901	E5600	E5700	E5615	E5616
Mainboard						
Chipset	i945G Express	i945G iAMT	SIS761	i915GV	NVIDIA C51PV	NVIDIA C51PV
Mainboard Number	D2164	D2168	D2264	D2334	D2464-A	D2464-B TPM
Mainboard form factor	proprietary	proprietary	proprietary	proprietary	proprietary	proprietary
Processor socket	LGA 775	LGA 775	AMD 939	LGA 775	Socket AM2	Socket AM2
Front side bus resp. system bus support	533/800/1066 MHz	533/800/1066 MHz	2000 MHz	533/800 MHz	2000 MHz	2000 MHz
BIOS version	Phoenix Vers.5.0	Phoenix Vers.5.0	Phoenix Vers.5.0	Phoenix Vers.5.0	Phoenix Vers. 6.0	Phoenix Vers. 6.0
Flash EPROM BIOS update by software	x	x	x	x	x	x
Recovery BIOS	x	x	x	x	x	x
Processor						
Intel® Core™ 2 Duo	-	-	-	-	-	-
Second level cache	-	-	-	-	-	-
Front side bus (FSB)	-	-	-	-	-	-
Intel® Pentium® D9xx	up to D940	up to D940	-	-	-	-
Second level cache	2x2MB	2x2MB	-	-	-	-
Front side bus (FSB)	800MHz	800MHz	-	-	-	-
Intel® Pentium® D8xx	up to D820	up to D820	-	-	-	-
Second level cache	2x1MB	2x1MB	-	-	-	-
Front side bus (FSB)	800 MHz	800 MHz	-	-	-	-
Intel® P4 6xx	up to 661	up to 661	-	up to 661	-	-
Second level cache	2MB	2MB	-	2MB	-	-
Front side bus (FSB)	800 MHz	800 MHz	-	800 MHz	-	-
Intel® P4 5xx	521	521	-	521	-	-
Second level cache	1MB	1MB	-	1MB	-	-
Front side bus (FSB)	800 MHz	800 MHz	-	800 MHz	-	-
Intel® Celeron D	up to D351	up to D351	-	up to D351	-	-
Second level cache	256 KB	256 KB	-	256 KB	-	-
Front side bus (FSB)	533 MHz	533 MHz	-	533 MHz	-	-
Athlon™ 64 X2 (socket)	-	-	3800+ (939)	-	up to 4600+ (AM2)	up to 4600+ (AM2)
Second level cache	-	-	2 x 512 KB	-	2 x 512 KB	2 x 512 KB
System Bus support	-	-	2000 MHz	-	2000 MHz	2000 MHz
Athlon™ 64 X2 Energy efficient (socket)	-	-	-	-	3800+ (AM2)	3800+ (AM2)
Second level cache	-	-	-	-	2 x 512 KB	2 x 512 KB
System Bus support	-	-	-	-	2000 MHz	2000 MHz
AMD Athlon™ 64 (socket)	-	-	up to 4000+ (939)	-	3800+ (AM2)	3800+ (AM2)
Second level cache	-	-	512 KB / 1MB	-	512 KB	512 KB
System Bus support	-	-	2000 MHz	-	2000 MHz	2000 MHz
AMD Sempron™ (socket)	-	-	3000+ (939)	-	3200+ (AM2)	3200+ (AM2)
Second level cache	-	-	128 KB	-	128 KB	128 KB
System Bus support	-	-	1600MHz	-	1600MHz	1600MHz
AMD Sempron™ Energy efficient (socket)	-	-	-	-	3000+/3200+ tbd (AM2)	3000+/3200+ tbd (AM2)
Second level cache	-	-	-	-	128 KB/256 KB tbd	128 KB/256 KB tbd
System Bus support	-	-	-	-	1600 MHz	1600 MHz
Memory						
Memory support	400/533/667 MHz	400/533/667 MHz	400 MHz	400/533 MHz	533/667/800 MHz	533/667/800 MHz
DIMM slots	4	4	4	4	4	4
dual channel support	x	x	x	x	x	x
Max. capacity DDR SDRAM 400 MHz	-	-	4GB	-	-	-
Max. capacity DDR2 SDRAM 533 MHz	4GB	4GB	-	4GB	-	-
Max. capacity DDR2 SDRAM 667 MHz	-	-	-	-	4GB	4GB
for dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same	4GB address space thereof, max. 3.0GB usable for physical main memory	4GB address space thereof, max. 3.0GB usable for physical main memory		4GB address space thereof, max. 3.0GB usable for physical main memory		
for dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules)			4GB address space thereof, max. 3.0GB usable for physical main memory			
Interfaces						
Mouse/keyboard (PS2)	x/x	x/x	x/x	x/x	-/-	-/-
Serial (9pi, 16 byte FIFO, 16550 compatible)	x	x	x	x	x	x
Second serial port	optional	optional	optional	optional	x	x
Parallel (25pin with EPP and ECP)	x	x	x	x	-	-
Display (15 pin, VGA)	x	x	x	x	x	x
Display (DVI)	optional	optional	optional	optional	optional	optional
Micro (mono) rear	-	-	-	-	-	-
Line in (stereo) rear	x	x	x	x	x	x
Line out (stereo) rear	x	x	x	x	x	x
Micro (mono) front	x	x	x	x	x	x
Headphone in front	x	x	x	x	x	x
LAN RJ45	x	x	x	x	x	x
Universal Serial Bus (USB 2.0) in total	8	8	8	8	8	8

	E5905	E5901	E5600	E5700	E5615	E5616
therefore USB						
rear	4	4	4	4	4	4
USB front	2	2	2	2	2	2
USB internal	2	2	2	2	2	2
Interfaces add on cards						
Dual port RS232 , serial	optional	optional	optional	optional	optional	optional
LAN on board						
10/100/1000 MBit/s	Broadcom BCM5751T	Intel® 82573E	Realtek RTL8110	Realtek RTL8110	NVIDIA C51PV	NVIDIA C51PV
Wake up on LAN (WOL)	x	x	x	x	x	x
PXE	x	x	x	x	x	x
BootP	optional	optional	optional	optional	-	-
LAN add on cards						
Gigabit Ethernet, SysKonnect	optional	optional	optional	optional	optional	optional
Audio on board						
Internal speaker supports audio playback	x	x	x	x	x	x
AC97	-	-	Realtek ALC655	-	-	-
High definition audio	Realtek ALC260	Realtek ALC260	-	Realtek ALC260	Realtek ALC 260	Realtek ALC 260
I/O controller onboard						
Fast IDE/Ultra DMA-100 bus master capability	for 2 drives	for 2 drives	for 2 drives	for 2 drives	-	-
Serial ATA	2	2	2	2	4	4
Serial ATA II (NCQ/3GBit)	-/x	-/x	x/-	-	x/x	x/x
Raid 1/0	-	-	x	-	x	x
Drive bays	3	3	3	3	3	3
internal 3,5"	1	1	1	1	1	1
external 3,5"	1*	1*	1*	1*	1*	1*
external 5,25"	1*	1*	1*	1*	1*	1*
	* optional internal 3.5"	* optional internal 3.5"	* optional internal 3.5"	* optional internal 3.5"	* optional internal 3.5"	* optional internal 3.5"
Floppy disk drive 1.44 MB standard	optional	optional	optional	optional	optional	optional
Hard disk drives						
Serial ATA 40 GB	x	x	x	x	-	-
Serial ATA II 40 /80 / 160 / 250 GB supporting NCQ and 3GBit (if chipset support is available)	-/x/x/x	-/x/x/x	-/x/x/x	-/x/x/x	x/x/x/x	x/x/x/x
Optical drives (IDE)						
48-speed ATAPI CD ROM	optional	optional	optional	optional	-	-
16/48-speed ATAPI DVD ROM	optional	optional	optional	optional	-	-
48/24/48/16-speed ATAPI CD-RW / DVD ROM	optional	optional	optional	optional	-	-
DVD SuperMulti writer double layer support	optional	optional	optional	optional	-	-
24/10/24/8-speed ATAPI CD RW / CD ROM slim	-	-	-	-	-	-
Multibay 24/10/24/8 CD RW / DVD ROM slim	-	-	-	-	-	-
Multibay DVD writer	-	-	-	-	-	-
Optical drives (SATA)						
16/48-speed DVD ROM	-	-	-	-	optional	optional
48/24/48/16-speed CD-RW / DVD ROM	-	-	-	-	optional	optional
DVD SuperMulti writer double layer support	-	-	-	-	optional	optional
24/10/24/8-speed CD RW / CD ROM slim	-	-	-	-	-	-
Slots						
PCI	2 (190 mm) low profile	2 (190 mm) low profile	2 (190 mm) low profile	2 (190 mm) low profile	2 (190 mm) low profile	2 (190 mm) low profile
PCI Express x16	1 (210 mm) low profile	1 (210 mm) low profile	1 (210 mm) low profile	only ADD2(DVI) support	1 (210 mm) low profile	1 (210 mm) low profile
PCI Express x1	1 (210 mm) low profile	1 (210 mm) low profile	1 (210 mm) low profile	1 (210 mm) low profile	1 (210 mm) low profile	1 (210 mm) low profile
	1 PCI Express x16 low profile (190mm) and 2 PCI full height (174/210 mm) optional	1 PCI Express x16 low profile (190mm) and 2 PCI full height (174/210 mm) optional	1 PCI Express x16 low profile (190mm) and 2 PCI full height (174/210 mm) optional	1x low profile (DVI support) and 2 PCI full height (174/210 mm) optional	1 PCI Express x16 low profile (190mm) and 2 PCI full height (174/210 mm) optional	1 PCI Express x16 low profile (190mm) and 2 PCI full height (174/210 mm) optional
Graphic on board	Intel® GMA950	Intel® GMA950	SiS761	Intel® GMA900	NVIDIA C51PV	NVIDIA C51PV
Shared memory depending on driver	up to 224MB	up to 224MB	32, 64 or 128MB	up to 128MB	up to 128MB	up to 128MB
Resolution (color depth up to 32 Bit/pixel)						
1024 x 768 (recommended / max*)	85 / 120 Hz	85 / 120 Hz	85 Hz	85 / 120 Hz	120 / 200 Hz	120 / 200 Hz
1280 x 1024 (recommended / max*)	85 / 120 Hz	85 / 120 Hz	75 Hz	85 / 120 Hz	100 / 150 Hz	100 / 150 Hz
1600 x 1200 (recommended / max*)	85 Hz	85 Hz	60 Hz	85	85 / 100 Hz	85 / 100 Hz
1440 x 900 widescreen TFT (VGA / DVI)	- / x	- / x	x / x	- / x	x / x	x / x
1680 x 1050 widescreen TFT (VGA / DVI)	x / x	x / x	- / x	x / x	x / x	x / x
1920 x 1200 widescreen TFT (VGA / DVI)	x / x	x / x	- /'-	x / x	x / x	x / x
* refresh rates reflect the max. graphics capabilities. Video quality can be						

deteriorated when using maximum settings. For TFT we recommend to use 60Hz.						
Graphic add on cards						
NVIDIA GeForce FX 6200TC 16MB, DVI LP	-	-	optional	-	-	-
NVIDIA GeForce FX 6200TC 128MB, dual DVI/VGA	-	-	-	-	-	-
NVIDIAGeForce FX 7300LE 128MB, LP	optional	optional	optional	-	optional	optional
NVIDIAGeForce FX 7300LE 256MB, LP	optional	optional	optional	-	optional	optional
NVIDIAGeForce FX 7300LE 256MB	-	-	-	-	-	-
DVI extension adapter	optional	optional	optional	optional	optional	optional
Electrical values						
Rated voltage range, AC	100 - 240 V	100 - 240 V	100 - 240 V	100 - 240 V	100 - 240 V	100 - 240 V
Rated frequency range	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Operating voltage range, AC	90 - 264 V	90 - 264 V	90 - 264 V	90 - 264 V	90 - 264 V	90 - 264 V
Operating line frequency range	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz	47 - 63 Hz
Max. output of power supply	270 W	270 W	270 W	270 W	270 W	270 W
Monitor outlet	yes, switched	yes, switched	yes, switched	yes, switched	yes, switched	yes, switched
Power consumption for standard configuration (W)						
Peak (running app. CD in use)	180W	183W	103W	174W	120W	120W
Average (running OS, Idle mode)	80W	78W	54W	67W	57W	57W
Minimum (ACPI status S5, soft off, WOL enabled)	1,2W	1,5W	1,7W	1,5W	1,1W	1,1W
Minimum (ACPI status S5, soft off, wake up power button only)	-	-	-	-	1,1W	1,1W
Minimum **"low power soft off"** (FSC patent pending) (ACPI S5, soft off, wake up power button only)	-	-	-	-	-	-
Heat dissipation (kJ/h / BTU/h)						
Peak (running app. CD in use)	648 kJ/h / 615 BTU/h	659 kJ/h / 625 BTU/h	371 kJ/h / 352 BTU/h	627 kJ/h / 594 BTU/h	TBD	TBD
Average (running OS, Idle mode)	288 kJ/h / 273 BTU/h	281 kJ/h / 267 BTU/h	195 kJ/h / 185 BTU/h	242 kJ/h / 229 BTU/h	TBD	TBD
Minimum (ACPI status S5, soft off)	4,3 kJ/h / 4,1 BTU/h	5,4 kJ/h / 5,2 BTU/h	6,1 kJ/h / 5,8 BTU/h	5,4 kJ/h / 5,2 BTU/h	TBD	TBD
1W = 3,6kJ/h, 1W = 3,4121BTU/h						
Noise for standard configuration						
A weighted sound power level Lwad / Workplace related A-weighted sound pressure level LpAm (bystander position) (ISO9296)						
LWAd in B / LpAm in dB (Idle mode)	3,4B / 19dB	3,4B / 19dB	3,6B / 21dB	3,4B /19dB	3,7B / 22dB	3,7B / 22dB
LWAd in B / LpAm in dB (office work)	3,9B / 24dB	3,9B / 24dB	3,9B / 24dB	4,1B /26dB	3,7B / 23dB	3,7B / 23dB
LWAd in B / LpAm in dB (Operating, HDD performance)	4,0B / 26dB	4,0B / 26dB	4,1B / 25dB	4,1B /27dB	3,7B / 23dB	3,7B / 23dB
Ambient temperature (IEC 721)	15°C'- 35°C	15°C'- 35°C	15°C'- 35°C	15°C'- 35°C	15°C'- 35°C	15°C'- 35°C
Dimensions (H x W x D)	100 x 340 x 380 mm	100 x 340 x 380 mm	100 x 340 x 380 mm	100 x 340 x 380 mm	100 x 340 x 380 mm	100 x 340 x 380 mm
Operating position (vertical/horizontal)	x / x (no feet needed)	x / x (no feet needed)	x / x (no feet needed)	x / x (no feet needed)	x / x (no feet needed)	x / x (no feet needed)
Weight (depending on config)	approx. 10 kg	approx. 10 kg	approx. 10 kg	approx. 10 kg	approx. 10 kg	approx. 10 kg
Approvals and standards						
CE certification according to EU Directives 89/336/EEC (EMC) and 73/23/EEC (Product safety)	x	x	x	x	x	x
Ergonomics ISO9241 (GS mark)	x	x	x	x	x	x
Product safety IEC60950, EN60950, UL 60950, CSA22.2, UL 60950, CSA22.2, No.60950	x	x	x	x	x	x
Electromagn. compatibility EN55022/B, FCC class B, EN55024, EN61000-3-2/3	x	x	x	x	x	x
Environmental compatibility						
Energy Star	x	x	x	x	TBD	TBD
Blue Angel	x	x	x	x	TBD	TBD
Nordic Swan	x	x	x	x	TBD	TBD
Software (compatibility / preinstalled)						
Microsoft Windows 2000	x / -	x / -	x / -	x / -	x / -	x / -
Microsoft Windows XP Home	x / optional	x / optional	x / optional	x / optional	x / optional	x / optional
Microsoft Windows XP Professional	x / optional	x / optional	x / optional	x / optional	x / optional	x / optional
Microsoft Windows XP Professional x64 Edition	x / optional	x / optional	x / optional	- / -	x / optional	x / optional
Microsoft Windows Vista™ capable (min. 512MB RAM necessary)	x	x / optional	graphics card necessary	x	x	x
Redhat RHEL4 Linux certified	x	-	planned	-	planned	planned
Additional Software						
Drivers and Utility DVD (DUDVD)	x	x	x	x	x	x
XONTROL (noise reduction for optical drives)	x	x	x	x	x	x
SafeStandby	x	x	x	x	x	x
Altiris Local Recovery Pro	-	-	-	-	x	x

Recover Pro disaster recovery solution	optional	optional	optional	optional	-	-
Others						
Thermal Management	x	x	x	x	x	x
Keyboard on (Fujitsu Siemens Computers keyboard required)	x	x	x	x	x	x
Spare part availability	5 years	5 years	5 years	5 years	5 years	5 years
Compatibility (references)						
Microsoft Operating Systems (HCT / HCL entry)	x	x	x	x	x	x
PC 2001, DMI 2.0, WMI 1.5, USB 2.0, Hyper-Threading	x	x	x	x	x	x
Manageability						
DeskView 10.x client management including:						
On/Offline remote client management	x	x	x	x	x	x
Detailed system inventory management and reports	x	x	x	x	x	x
BIOS Management	x	x	x	x	x	x
Remote power management	x	x	x	x	x	x
System notifications	x	x	x	x	x	x
Advanced alerts (ASF implementation)	x	-	-	-	-	-
Security Remote Control	x	x	x	x	x	x
DeskView Helpdesk Integration	x	x	x	x	x	x
DeskUpdate Driver management	x	x	x	x	x	x
DeskView Migrate	optional	optional	optional	optional	optional	optional
DeskView Control	optional	optional	optional	optional	optional	optional
PXE 2.1 Boot code	x	x	x	x	x	x
BootP Boot Code including Bootmanage Administrator Software	optional	optional	optional	optional	-	-
Wake up from S5 (off mode)	x	x	x	x	x	x
Intrusion switch	optional	optional	optional	optional	optional	optional
Security						
Physical Security implemented in the cabinet						
Prepared for Kensington lock, eye for padlock, seal option	x	x	x	x	x	x
Integrated cabinet lock	optional	optional	optional	optional	optional	optional
System Security						
Boot sector virus protection	x	x	x	x	x	x
Write protect option for the Flash EPROM	x	x	x	x	x	x
Embedded security (TPM1.1)	optional	x	-	-	-	-
Embedded security (TPM1.2)	-	-	-	-	-	x
Norton Internet Security (NIC)	x	x	x	x	x	x
Control of all USB interfaces / external USB interfaces detachable separately	x / x	x / x	x / -	x / -	x / x	x / x
Boot protection for floppy disk/CD drive and write protection for floppy disk drive	x	x	x	x	x	x
Control of external interfaces	x	x	x	x	x	x
User Security						
User and supervisor BIOS password	x	x	x	x	x	x
SystemLock BIOS SmartCard Security	x	x	x	-	x	x
Hard disk password	x	x	x	x	x	x
Access protection via external SmartCard reader	optional	optional	optional	optional	optional	optional
Access protection via internal SmartCard reader	optional	optional	optional	optional	optional	optional
Fujitsu Siemens Computers MEMORYBIRD BIOS lock	x	x	-	-	x	x
Serviceability						
FlexySlot	x	x	x	x	x	x
EasyFix	x	x	x	x	x	x
EasyChange (for HDD / for optical drives)	x / x	x / x	x / x	x / x	x / x	x / x
EasyPull	x	x	x	x	x	x

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